

Abstract

An appropriate engine plate, having a bolt hole pattern to match a hole pattern in an engine in a front engine van type vehicle, is attached to an adapter arm tube attachable to the arm (e.g. boom) of a conventional engine floor hoist. One end of the adapter arm tube is telescopically fitted onto the hoist arm, and the other tube end has a pair of spaced apart forwardly extending hinge plates that define a horizontal attachment axis. The engine plates have socket-like hinge plates which can be connected with hinge pins to the adapter hinge plates of the adapter arm, providing a horizontally aligned hinge attachment between the engine and the hoist arm. The tilt angle of the engine plate and an attached engine is adjustable by a tilt control in the form of an extendable/retractable shaft which acts between the hoist adapter arm and a region of the engine, such as the crankshaft pulley, vertically spaced from the horizontal hinge axis of the attached engine adapter plate. As the hoist lifts an attached engine free of its detached mounts, and is withdrawn from the vehicle, the tilt control can be manipulated to avoid contact with the surrounding parts of the engine compartment until the engine is completely separated from the vehicle.